The next frontier in computing

November 16, 2016

Exascale computing refers to computing systems capable of at least one exaflop or a billion billion calculations per second (10^{18}). That is 50 times faster than the most powerful supercomputers being used today and represents a thousand-fold increase over the first petascale computer that came into operation in 2008. How we use these large-scale simulation resources is the key to solving some of today's most pressing problems, including clean energy production, nuclear reactor lifetime extension and nuclear stockpile aging.